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UMI

The Eastern Shore's mild climate and fertile soil produce an annual crop of broilers which would furnish a chicken dinner for nearly every American. Its market gardens could complete the menu. Almost any American vegetable can be raised on Maryland's green acres—in some areas two crops a season. Local produce is preserved by canneries along the Eastern Shore and marketed widely.

Dairy farms are the state's big agricultural venture. They dot the Eastern Shore, but in the Piedmont—the plateau that separates coastal plain from mountains—they pattern the rolling fields with mammoth barns and towering silos. White fences edge pastures and tree-shaded farmhouse yards. Corn, chief grain crop, submerges thousands of Piedmont acres in an ocean of tossing green. Hay, wheat, and oats grow tall and lush. In the southern region, tobacco, a Colonial heritage, is the money crop. In the west, apples are famous.

Important as is agriculture, Maryland's industry tops it. Like the nation's, the state's manufacturing is heaviest in the northeast, around Baltimore. Steel plants flame and roar at Sparrows Point. Refineries process copper, oil, and sugar. Factories crowding the Baltimore area turn out men's clothing, paper, chemicals, leather goods, and textiles. Since Colonial days, Marylanders have built ships. Now aircraft roll off assembly lines at Hagerstown and Middle River to swell the nation's defenses.

JUSTIN LOCKE

In the far corner of the state, west of Cumberland, miners hack soft coal from wooded hills and worry about the changeover from steam to Diesel on local railroad systems—the B. & O. and the Western Maryland. From the Alleghenies come gravel and sand, limestone and slate. Columns of Maryland marble stand in the nation's Capitol in Washington.

Marylanders find diversity, too, in their leisure time. Sleek log canoes, sailing versions of Indian

Surrounded by "Flying Boxcars," Fairchild Aircraft Workers at Hagerstown Study Their Blueprints. Near Baltimore Is Middle River Aircraft Plant of Glenn L. Martin, Early Pioneer of Aviation, Whose Gift of $2,500,000 to the University of Maryland Helped Establish New Martin Institute of Technology (with Accent on Aeronautics)

NATIONAL GEOGRAPHIC PHOTOGRAPHER VOLKMAR WENTZEL

Out Where the Maryland West Begins, Three States Meet Along the Potomac: Maryland (right), Virginia (foreground), and the Point of West Virginia Containing Harpers Ferry

Prosperous Maryland Is a Miniature America

Maryland is not called "America in miniature" for nothing. From Atlantic breakers and soft Chesapeake shores the land slopes gently upward through the state's "midwest" around Westminster and Frederick. Beyond is a mountainous west. Southern Maryland, the peninsula south of Washington, D. C., is Dixie all over again. Bel Air, northeast of Baltimore, looks like New England. Hagerstown is Pennsylvania German.

Not content to ape other areas, however, Maryland contributes an individual and distinctive personality to the character of America. Chesapeake Bay is the biggest dent on the Atlantic coast line, and has shaped Maryland's development. Its port, Baltimore, ranks second to New York in foreign trade. The Baltimore and Ohio Railroad provides the shortest link between the holds of Atlantic freighters and the productive Ohio Valley. Besides bringing ocean-going ships far inland, the bay shelters a playground for yachtsmen (illustration, cover) and nurtures in its salty recesses some of America's most succulent seafood.

Oyster boats dredge the shoals of the bay in a graceful mingling of sails. (Power boats are illegal—to conserve Maryland's oysters.) Diamondback terrapin, caught in the lower bay, furnish a famous Maryland dish. Crisfield, near the southern tip of the Eastern Shore (east of the bay), is the center of the terrapin trade and packs and ships more oysters than any other United States community.

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The Siesta: Tropical Seventh-Inning Stretch

In a good many countries of the world it's useless to call on a businessman early in the afternoon. His firm is likely to be closed, his employees home asleep. It's the siesta—ancient and practical way of keeping healthy in lands where days are long, and midday sun hot.

Contrary to popular belief, the Spanish didn't originate the siesta, though they named it from the Latin *sexta hora*: sixth hour after dawn. Roman centurions nodded during the heat of the day in the north African and Near Eastern regions of their empire. Moors brought the custom to Spain and found it had long been practiced there. Spanish conquistadores carried the habit with them to Central and South America.

When Costa Rican soldiers manned their strong points during the recent flare-up, they found time to doze away the early afternoon heat. In Ciudad Trujillo, capital of the Dominican Republic, the streets are desolately empty from shortly after noon until a fire siren rouses the slumberers to work at 1:45. In some lands, business, politics, international trade, rebellion, and even housework come to a complete stop for as long as four hours during the blazing heat of the afternoon.

Like the seventh-inning stretch of baseball, the siesta serves a definite purpose—of tuning up the human machine. In tropical countries, most work is done in the comparative cool of morning and late afternoon. People are apt to stay up late at night. They need their midday snooze just as they need to escape the debilitating effects of the worst heat.

But there are disadvantages to the siesta in bustling modern cities like Mexico's capital, where the public transportation system couldn't cope with carrying the entire breadwinning population four times a day between home and work. In Mexico City, the siesta has been largely abolished. But in Madrid, proposals to end the custom have stirred up violent dissension. And in the smaller towns of the hotter countries, between twelve and two or three p.m., the scene below, which was photographed in Mexico on a sizzling afternoon, is apt to remain typical for centuries to come.

JUSTIN LOCKE

SEPARATE COLOR SHEETS
AVAILABLE TO
TEACHERS AND STUDENTS

Separate color sheets from *The National Geographic Magazine* may be ordered at cost by teachers and students as classroom aids, also by librarians. Peoples and lands of the world, United States subjects, and natural history are among the fields covered by the pictures. Send for a list of subjects and order blank.

NATIONAL GEOGRAPHIC PHOTOGRAPHER ROBERT F. SISSON

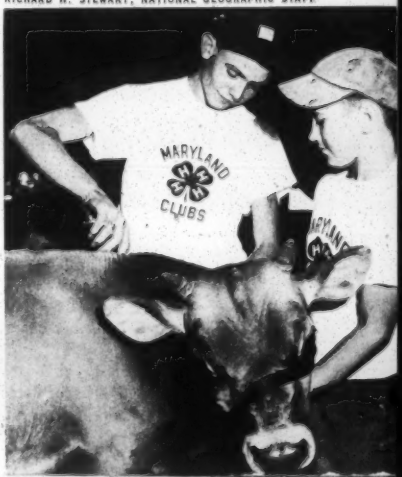
From Merrie England Comes the Maryland Hunt—and Tilting Tournaments

craft, whiten the waters of Chesapeake Bay on hot summer days. Crisp autumn weather brings the hunter to marshes alive with wild ducks and geese. Inland waters hold bass, perch, trout, while off the Atlantic coast tuna and marlin lure the big-game fisherman. In the west, hikers scale Appalachian peaks and camp in state parks and recreation areas.

In 1730, sixteen red foxes were brought from England for the hunting pleasure of settlers who pioneered on Lord Calvert's royal grant. Today, in the hunt-club section surrounding Baltimore, pink-coated citizens and their hounds still chase red foxes over the rolling fields.

References—Maryland appears on the National Geographic Society's map of the Northeastern United States. Write the Society, Washington 6, D. C., for a map price list. *National Geographic Magazine*, April, 1954, "Roving Maryland's Cavalier Country"; Aug., 1953, "Beltsville Brings Science to the Farm"; Sept., 1950, "'Delmarva,' Gift of the Sea"; April, 1941, "Maryland Presents—"; Sept., 1939, "Chesapeake Odyssey"; June, 1936, "Annapolis, Cradle of the Navy." *School and library discount price for Magazine issues a year or less, 50¢; through 1946, 65¢. Write for prices of earlier issues.*

RICHARD H. STEWART, NATIONAL GEOGRAPHIC STAFF



Proud Four-H Boys Groom a Jersey Calf for the Maryland State Fair at Timonium, North of Baltimore. The Animal Will Compete with Other Sleek Specimens. Also Judged Are Beef Cattle, Horses, Fruits, Vegetables, and Poultry from Maryland's Thriving Farmlands

"Picking a Wing" . . .

Jams also form against the bank (right). With a twist of the peavey, loggers free lodged logs. The indispensable tool was devised by Joseph Peavey, a Maine blacksmith, in 1858. Logging moved west with America—from New England to the Susquehanna, then on to Michigan and Wisconsin, and finally to the Pacific northwest. Demand always increases despite increased usage of other building materials. Many of these logs will end up at the Potlatch mill in Lewiston, Idaho, where enough lumber for 40 houses is milled every eight hours. To see how loggers live, turn the page.

PHOTOGRAPHS BY ROSS HALL

With Peavey and Spiked Boots on Idaho's Logging Rivers

Each spring when such streams as the Clearwater and Priest roar in freshet through the canyons of Idaho's mountainous panhandle, men like Tom Kiiskila (left) herd the "toothpicks" to downriver mills. Strong as bulls but agile as deer, these loggers keep the timber moving. They break up jams in midriver by dislodging the key log, then scurry shoreward or boatward over the onrushing mass.

"Radio Stars" Broadcast from Outer Space

In 1931, a Bell Telephone Laboratories engineer studying radio static noticed a strange hissing sound coming from his set. His investigations proved the workings of his loud-speaker did not cause the noise. It originated in outer space.

Radio equipment, back then, wasn't capable of following through on the engineer's discovery. But World War II spurred new developments. Huge disk-shaped antennae—radio telescopes—now probe the heavens, listening for static the way radar searches for aircraft.

With these giant receivers, scientists have learned that hydrogen atoms, sparsely scattered in the void between stars, have a high-pitched note of their own. When the radio telescopes point in certain directions they pick up other, louder noises which come from stars or clouds of dust and gas floating in space. These remote sources of energy are called "radio stars." Only a few of the hundreds whose "messages" have been received are visible through an optical telescope.

One interstellar "broadcasting station" is the dusty, gaseous remnant of a star explosion which Chinese astronomers witnessed in 1054. Two others are gas clouds in the Milky Way. Others are hidden in some of the familiar constellations—Cassiopeia, Sagittarius, Cygnus.

Heaven-sent radio waves are so much longer than light waves that it's hard to track them down exactly. For some wave lengths, it would take a mirrorlike antenna 150 miles in diameter to equal the accuracy of a one-inch telescope. England and Australia are both building metal-mesh saucers 250 feet across which can be aimed at particular radio stars. Saucers this size could be equipped and focused to send a signal to Mars or to track a rocket on its way to the moon.

References—*National Geographic Magazine*, Feb., 1952, "Our Universe Unfolds New Wonders."

Spiral Nebulae, Eons Away, Send "Messages" Picked up by Earthbound Receivers

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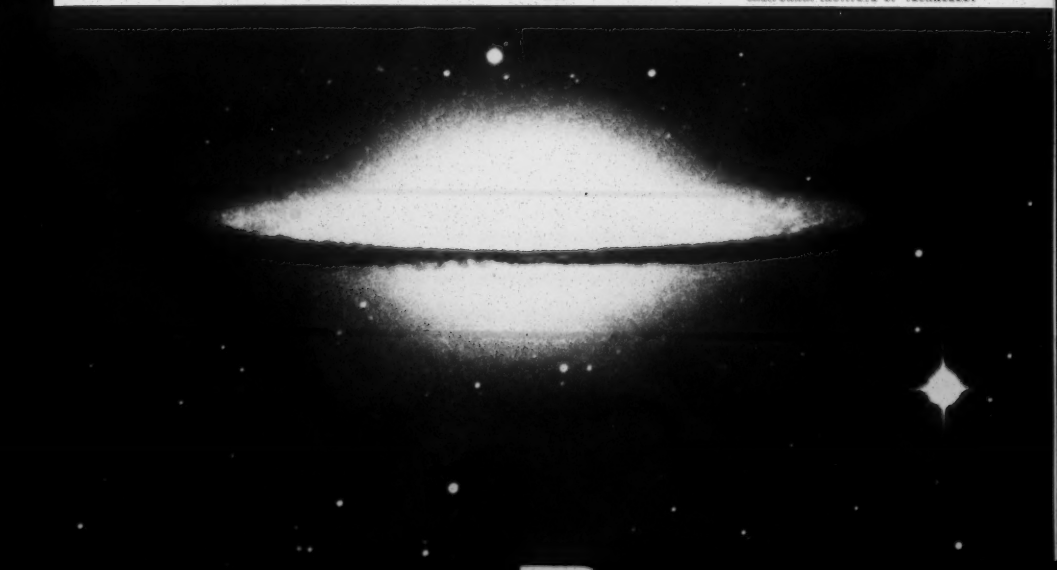

UMI

Chowtime Is Silent and Serious

Old-time cooks reserved the right to slap down anyone who talked too much during meals of salt pork and beans. The habit of silent eating remains, though today's dinners are as well balanced as a riverman on a log.

Life in a logging camp is austere—chow, sleep, and up early to loosen the boots with hot water, like Tom Kiiskila (at left), in readiness for a new day's work.

PHOTOGRAPHS BY ROSS HALL

Angel Falls was discovered in 1935 in a region that still foils exploration. Rightly described as a "lost world," Venezuela's Guiana is the vast wilderness—nearly half the entire country—lying south and east of the Orinoco River. Pale green savannas, plains, roll away from the river to the wall of dense jungle, the Gran Sabana. In this silent, all-but-impenetrable limbo of lush growth and steady rot, mosquitoes and vicious red ants wait to torture the explorer. Skin-boring flies, tarantulas, and deadly green-headed parrot snakes lurk in humid rain forest. Trees disintegrate at a touch. They have been dead for centuries, held up by tangled vines.

Yet there is beauty in the small blue, pink, and purple orchids, the red fronds lacing green foliage, the gaudy plumage of tropical birds. Along the Orinoco and its tributaries, Guarauno Indians, descendants of fierce Carib war tribes, harvest fish and giant turtles, balata (used in golf balls), rubber, tonka beans, and chicle.

The jungle breaks, finally, against the pink-hued mountains of the Guiana highlands whose legend of gold lured Sir Walter Raleigh to Venezuela in 1595. Seeking El Dorado (the Gilded One), fabulous Inca chief who was supposed to wash himself in gold dust, Raleigh probed the river mouths unsuccessfully, then returned in 1618, his last year of life. He fell ill at Trinidad, but his ships groped 400 miles up the Orinoco to the present site of Ciudad Bolívar, Venezuela's jungle city of 127,000. There the English sea dogs tangled with Spanish troops, defeated them, but had to turn back.

Raleigh's dream of gold may have been near the truth, for Spanish monks were shipping an estimated $1,400,000 worth of gold each month to Spain from mines in the interior. Most famous of these, the Totumo, never has been rediscovered. The Capuchin monks kept it secret through Bolívar's wars for Venezuelan independence.

But potentially richer than the Totumo's gold is the rich iron ore of Cerro Bolívar, 2,000-foot "iron mountain" of Venezuela. In only the past 16 years this deposit, claimed to be the richest mineral source in the world, has been

ERNEST G. HOLT

Upside Down Is Right Side Up for this Happy Sloth—The harmless, hairy, three-toed mammal sleeps and travels in underslung style. True to his wrong-way-round nature, he rests all day and hunts food by night. His search for green shoots gets him so tired he cries woefully in the black Venezuelan jungle.

RUTH ROBERTSON

Venezuela's Lost World Yields New Riches

Jimmy Angel shifted half sideways in the cockpit of his single-engine plane so he could scan the gravel stream bed as it flashed past beneath his wing. He was searching for signs of gold on the rock-strewn crest of the Auyán Tepuí plateau, some 9,000 feet above the jungle floor of Venezuela's Guiana.

Suddenly the ground dropped away from under him in a yawning five-mile-wide canyon. Spouting from just below the lip of the mesa was a white, tenuous rope of water, actually as wide as a city block. Angel watched it hanging in mid-air, wrapped in a gleaming shroud of mist. He hadn't found his gold, but he guessed he'd found something pretty important, if he could make people believe him: a waterfall that dropped close to 3,000 feet.

Jimmy Angel, legendary American pilot and prospector, was right in his guess. His waterfall (illustration above) is the world's highest—a total drop of 3,212 feet, 20 times the height of Niagara.

RUTH ROBERTSON

Madonna of the Jungle: Mother and Child Reflect the Deep Content of Guarauno Life

flung open. Puerto Ordaz sprouted almost overnight on the Orinoco, complete with a loading dock which American steel men had prefabricated in the United States and towed to Venezuela. Dredges channeled the Orinoco to float heavily laden ore ships upriver to the new port. A 91-mile railroad connects it with the ore workings.

About 400,000,000 tons of iron ore from Cerro Bolívar came last year to the new Fairless steel plant near Philadelphia to relieve the steady drain on the hard-worked iron ranges in Minnesota's Lake Superior region. The Venezuelan ore has a remarkably high grade—it is about 64 percent pure iron.

This is the Guiana's wealth today. Tomorrow's explorer may reach the unknown world beyond Auyán Tepuí, uncover new treasures, and fill in the blank spaces on modern maps.

References—Venezuela appears on the Society's map of South America. *National Geographic Magazine*, May, 1950, "Search for the Scarlet Ibis in Venezuela"; Nov., 1949, "Jungle Journey to the World's Highest Waterfall"; Jan., 1939, "I Kept House in a Jungle"; GEOGRAPHIC SCHOOL BULLETINS, Jan. 21, 1952, "Orinoco Cuts Jungle Path to Venezuela's Iron."